Bidder Complies No

Yes



#### **Fire Department** 385 East Oak Street Kankakee, Illinois 60901 (815) 933-0450 Fax (815) 933-0456

#### NOTICE OF REQUEST FOR SEALED BIDS

Proposal for Refurbishment/Repair of: One (1) - 2005 Pierce Arrow-XT Pumper

The Kankakee Fire Department hereby gives Public Notice of the request for sealed bids for the refurbishment/repair of one (1) 2005 Pierce Arrow-XT Pumper Apparatus and auxiliary equipment per the specifications.

Each proposal shall be received in a sealed envelope and clearly labeled "Fire Engine Refurbishment Bid".

Any proposal not received by the posted date and time shall be rejected. The City of Kankakee reserves the right to reject any or all bids and waive all informalities. Sealed proposals are to be received by 10:00 am CST on the 28th day of June, 2021.

Sealed proposals shall be publicly opened on the 28th day of June, 2021 at 10:00 AM CST in the Clerk's Office (or related meeting/conference room) for the City of Kankakee located at 304 S. Indiana Ave. No award will be considered until the Kankakee Fire Department has had sufficient time to review proposal.

Copies of the bid proposal can be obtained by emailing bidopenings@citykankakee-il.gov or by requesting a copy from the City Clerk's office (815) 933-0480 or from the City of Kankakee's website www.citykankakee-il.gov

#### Contact person:

Any questions pertaining to the published specifications shall be directed to Chief Bryan LaRoche at the following contact information:

Fire Station Telephone: 815-933-0452 Cellular Telephone: 779-225-4635 Email: bslaroche@citykankakee-il.gov

#### To submit sealed bid proposal:

Sealed proposals to be mailed to or delivered in person at: (If delivering in person, wear a mask and practice social distancing) Kankakee City Clerk's Office

304 S. Indiana Ave. Kankakee, IL 60901

Bidder		
Complies		
7.7	3.7	

Yes 1

#### SINGLE SOURCE MANUFACTURER

The definition of single source is a manufacturer that designs and manufactures their products using an integrated approach, including the chassis, cab and body being fabricated and assembled on the bidder's premises. The warranties relative to the chassis and body design (excluding component warranties such as engine, transmission, axles, pump, etc.) will be from a single source manufacturer and not split between manufacturer (i.e. body and chassis).

## **WARRANTY**

A separate warranty page detailing the warranty coverage will be provided with the proposal.

#### INSURANCE PROVIDED BY BIDDER

## COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence \$1,000,000

Products/Completed Operations Aggregate \$1,000,000

Personal and Advertising Injury \$1,000,000

General Aggregate \$2,000,000

Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form and shall include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy shall include Owner as an additional insured when required by written contract.

## COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder shall, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage shall be written on a Commercial Automobile liability form: Each Accident Combined Single Limit: \$1,000,000

#### UMBRELLA/EXCESS LIABILITY INSURANCE

Bidder		
Complies		
37.00	Ma	

Yes

The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate: \$3,000,000 Each Occurrence: \$3,000,000

The umbrella policy shall be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies. The required limits can be provided by one (1) or more policies provided all other insurance requirements are met. Coverage shall be provided by a carrier(s) rated A-or better by A.M. Best. All policies shall provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance shall provide the following cancellation clause: Should any of the above described polices be cancelled before the expiration date thereof, notice shall be delivered in accordance with the policy provisions. Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate shall show the purchaser as certificate holder.

#### INSURANCE PROVIDED BY MANUFACTURER

#### PRODUCT LIABILITY INSURANCE

The manufacturer shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence \$1,000,000

Products/Completed Operations Aggregate \$1,000,000

Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form. The manufacturer's policy shall include the owner as additional insured when required by written contract between the Owner and an authorized dealer.

# UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence: \$25,000,000

Bidder		
Complies		
Voc	No	

Aggregate: \$25,000,000

The umbrella policy shall be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies. The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage shall be provided by a carrier(s) rated A- or better by A.M. Best. All policies shall provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance shall provide the following cancellation clause: Should any of the above described polices be cancelled before the expiration date thereof, notice shall be delivered in accordance with the policy provisions.

Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate shall show the purchaser as the certificate holder.

## WELDING REQUIREMENTS

American Welding Society D1.1-96 standards for structural steel welding. All aluminum welding will be done to American Welding Society and ANSI D1.2-96 requirements for structural welding of aluminum. Flux core arc welding will use alloy rods, type 7000, American Welding Society standards A5.20- E70T1.

## **PAYMENT TERMS**

#### SHIPPING PRECAUTIONS

The following shipping precautions must be completed before transportation of the fire department's apparatus to. Failure to complete the listed items below may result in additional costs to the fire department.

- 1. All water tanks, foam tanks, pumps, all inlets and discharge plumbing, all drains, and any other plumbing are to be completely drained prior to being driven or flat-bedded.
- 2. Strap down all loose equipment unless arranged prior to shipping in order to make the repair process easier and to eliminate the potential for lost equipment while the unit is being refurbished or repaired.
- 3. All loose or potentially loose items should be taped or strapped to ensure they do not come loose during transit.

## INCOMING EMERGENCY PARKING BRAKE TEST

Bidder		
Complies		
37.00	Ma	

res

The following inspection will be performed by a qualified technician to insure this apparatus is safe to drive and perform work on. Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.

#### INCOMING BATTERY LOAD TEST

All truck starting system batteries and battery cables will be visually inspected for cracks, acid leaks, corrosion and overall condition. Along with the visual inspection a load test will be performed to verify the batteries cold cranking amps, voltage and shorted cells. Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.

#### **INCOMING VEHICLE INSPECTION**

The following inspections will be performed by a qualified technician(s) before any work begins. Inspections are to verify working components before disassembly, and to determine the overall condition of the truck.

- Incoming Electrical inspection
- Incoming Chassis Inspection and Road test
- Incoming Pump Test
- Incoming Body Inspection

Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.

\*\*\*\*ALL BIDS MUST INCLUDE AN ITEMIZED COST LIST OF ITEMS UNDERLINED\*\*\*\*

Bidder		
Complies		
Yes	No	

#### **CORROSION**

# FRAME RAIL CORROSION PUMPER - FRAME REPLACEMENT E-COATED

- Remove the water tank, tank cradle, grating, hosebed dividers and all plumbing attached to and/or through the tank area.
- Disassemble the body components, unstring electrical harness and remove the body from the apparatus.
- Disassemble the pumphouse components, unstring electrical harness, drive shafts and all associated plumbing. Remove the pumphouse from the apparatus.
- The front axle, suspension and steering gear assembly will be removed and reinstalled with new mounting hardware.
- Remove the fuel tank.
- Remove all body mounting substructures and reinstall with new hardware.
- Remove the rear tailboard / platform support and tow bar assembly and reinstall with new hardware
- The cab, engine and transmission will be removed and reinstalled on the new frame rails.
- Remove and reinstall all crossmembers and replace with new hardware
- The frame rails and frame liners will be removed and **replaced** with new frame rails and liners that are **E-Coated** for additional corrosion protection. The frame rails will be constructed of 120,000 psi yield strength heat-treated .38" thick steel, with 3.50" wide flanges
- Reinstall all removed assemblies; front bumper extension, cab lift mounting brackets, crossmembers and body mounting supports; torque bolts to spec.
- Reinstall the chassis air tank and mounting brackets.
- Reinstall the fuel tank
- Reinstall the driver and passenger side running board supports.
- The front axle assemblies to include suspensions will be reinstalled on the new frame rails.
- The rear axle assemblies to include suspensions will be reinstalled on the new frame rails.
- Reinstall the body and all components, to include the electrical harnesses
- Reinstall the pumphouse and all components, to include the electrical harnesses
- Reinstall the water tank cradle assembly.

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		
	1	lder
	Yes	iplies No
	168	NO
<ul> <li>Reinstall the grating, hosebed dividers and all plumbing attached to and/or through the tank area.</li> <li>Check alignment and road test apparatus.</li> <li>Check all DOT lighting, emergency warning lights.</li> <li>Install all new E-Coated crossmembers and paint black</li> <li>Install new E coated water tank cradle and paint black</li> <li>Replace all body mounting substructures with new E Coated front body mounting substructures, front mounting platforms, biscuits, cage nuts and hardware and paint black</li> <li>Replace the driver and passenger side running board supports with new E-Coated supports and paint black.</li> <li>Replace chassis air tanks, lines and mounting brackets.</li> <li>Replace the following brake system components and air tank pressure protection valves with new. <ul> <li>Double check valve</li> <li>Relay valve R-14</li> <li>Relay valve R-12</li> <li>Spring brake relay valve</li> <li>ABS valves</li> <li>Rubber brake lines</li> </ul> </li> <li>Replace all air valve mounting brackets.</li> <li>Needle/ scrape or sandblast front and rear axles to include suspension to remove corrosion and old paint, repaint black.</li> <li>Replace front bumper sub-structure with new and paint black</li> <li>Install new rear E-Coated tail board substructure and tow hook</li> <li>Replace rear springs, pins and hangers with new</li> <li>Replace Battery Boxes with new</li> <li>Replace Dower steering hoses with new</li> <li>Replace fuel tank, straps and sending unit with new</li> <li>Replace fuel tank, straps and sending unit with new</li> </ul>		
CHASSIS		
ENGINE		

Bidder		
Complies		
Yes	No	

Yes

The chassis will be powered by a new remanufactured S60 ENGINE 14L DDEC V6 Detroit Diesel electronically controlled engine

## **TAK 4 REFURB**

Remove and replace torsion rods and A Arms. New bushings will be included with the A Arm replacement.

## AXLE SEALS

All axle seals and wheel bearings will be removed and replaced with new.

#### **RADIATOR**

Radiator will be removed and replaced with new one of the same size.

#### **CAB**

#### **CAB AND CREW CAB DOORS**

The cab and crew cab doors windows and latches will be repaired and serviced to like new condition.

- Adjust and lubricate all door latches, any defective components will be replaced with new.
- Adjust and lubricate window regulators, any defective components will be replaced with new.
- -Replace the cab and crew cab door weather seals with double automotive type rubber seals around the perimeter of the door to ensure a weather tight fit.
- New window track lining and weather stripping will be supplied.
- All cab and crew cab doors will be properly adjusted for fit and operation to include new door stay straps.
- Replace the cab and crew cab door stainless steel lower interior door panels with new brushed stainless steel.
- Replace the upper vinyl door panels with new vinyl, matching the existing color.

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		lder	
	Yes	plies No	
- Chevron will be provided on cab doors to match rear of truck			
SEATS and UPHOLSTERY All seat bottoms will be removed and replaced with new			
All seat back upholstery fabric will be removed and replaced with new to match the existing color and material.			
SEAT BELTS (red) All seating positions in cab and crew cab will have new red seat belts.			
AIR BOTTLE HOLDER The Officer's SCBA type seat in the cab will have a "Hands-Free" auto clamp style bracket in its backrest. There will be a quantity of one (1) SCBA brackets.			
EMS CABINET The existing EMS cabinet and forward-facing DS crew seat will be removed. A new larger cabinet will be installed that allows for additional storage of equipment. The new EMS cabinet will be installed in place of the old cabinet and will be as wide as possible but to not interfere with ingress or egress through the crew cab	d v	leeper de vide. 62" wide b	nted [DW1]: Same compartment as current E4 but pth made as wide as the top tier, approximately 43"  back wall. 18.5" wide x 14" deep, from the passenger 43" wide x 27" deep.
doors.  The front of the compartment-will be open and secured by netting. The netting is to be made with 1.00" wide nylon material with 2.00" openings.			·
The cabinet will include three (3) shelves.			
The cabinet will be constructed of smooth aluminum and painted to match the cab interior.			
Cabinet Light There will be a strip light provided on each side. The lights will be controlled by a rocker switch on the cabinet exterior.			
BODY			

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		
		lder
		plies
	Yes	No
FRONT BUMPER Remove the from hydraulic hose reels, hydraulic reels and pump, the hose reels and the electrical source(s). Keep the existing space for storage of rescue chain.		
HOSE TRAY Add one (1) hose tray shall be made free floating on the driver's side running board, at the pump panel.		
The tray(s) shall be flanged and drop in from the top. The ends shall be tapered at the front and rear towards the center.		
Capacity of the tray shall be 75' of 5" LDH flat loaded.		
Rubber matting shall be installed on the floor of the tray to provide proper ventilation.		
ALUMINUM TREADPLATE All current treadplate will be removed from the truck for black coating.		
All vertical surfaces and non-walking / step surfaces will be coated with black Line-X.		
All stepping / walking horizontal surfaces and components will be coated with Safe-Stride black in color		
Black headed screws will be used to fasten all treadplate back into place upon completion.		
PUMP PANELS Both the PS and DS pump panels will be removed and replaced with Line-X coated black in color panels.		
ROLLUP DOORS, COMPARTMENTS The existing body roll up doors will be replaced with the following:		

Roll up compartment doors will be removed and replaced with new, double faced,

Bidder		
Complies		
37.00	Ma	

res

aluminum construction brushed finished, graphics and paint to match current pumper manufactured by GORTITE<sup>TM</sup> brand rollup doors.

#### SPEEDLAY/CROSSLAY COVER

Two (2) heavy black nylon webbing-like material made of 1" straps with a 2" box pattern. Webbing shall be provided to secure the speedlays and crosslay during travel, one on each side.

Each webbing shall cover the ends of the speedlay(s) and be fastened with 2 airplane seatbelt style quick-release latches at the top on each side and through footman loops at the bottom of the speedlay(s).

Treadplate cover over the 2.5" crosslay with a piano hinge on the forward edge.

#### **SHELVES**

Three (3) full width adjustable 500lb capacity shelves will be provided in a location to be determined by the customer. One (1) in PS1, passenger side rear compartment. A second one in PS3 the passenger side, just after the pump panel. Third (3<sup>rd</sup>) shelf in the DS 1, driver's side rear compartment to the right of the divider wall.

## **GENERATOR**

Generator will be removed from the apparatus. There will be a used diesel generator that will be sent with the apparatus that will be installed in the original generator's spot. It will be fueled by the apparatus fuel tank. The diesel generator will power the two (2) cord reels, one on each side and the two (2) 120v quartz lights, one on each side of the dunnage area.

## \*\*\*OPTION\*\*\*\*\*GENERATOR REBUILD

Generator will be removed from the truck and sent to the original equipment manufacturer, OEM service shop for evaluation and overhaul before being reinstalled

## 120v ELECTRICAL BODY OUTLETS

Bidder		
Complies		
	3.5	

Yes No

All 120v outlets on the truck will be removed to also include the wiring and any other ancillary associated items.

The remaining holes in the body will be welded closed, metal finished and painted over.

#### **RUB RAIL**

All rub rails will be removed and coated with black Line-X

## **FENDER CROWNS**

New black rubber fender crowns will be provided around all four (4) wheel openings.

#### **MUD FLAPS**

Four (4) new mud flaps will be provided to replace existing

#### FRONT BUMPER

Chevron the front bumper back/red.

#### **TRIM ON CAB**

All chrome trim on cab will be removed and coated with black Line-X before being reinstalled

## A.C. SYSTEM

The entire A.C system will be removed and replaced with the following new components.

A roof-mounted condenser that meets and exceeds the performance specification will be installed on the cab roof. The condenser cover and mounting legs to be painted white as provided by the A/C manufacturer.

An evaporator unit that meets and exceeds the performance specification will be installed in the cab, located in the center of the cab ceiling over the engine tunnel. The evaporator will include two (2) high performance cores and plenums with multiple outlets, one (1) plenum directed to the front and one (1) plenum directed to the rear of the cab.

Bidder		
Complies		
37.00	Ma	

res

The evaporator unit will be provided with adjustable air outlets strategically located to direct air flow to the driver, officer and crew cab area.

All hose used will be class 1 type to reduce moisture ingression into the air conditioning system.

The air conditioner refrigerant will be R-134A and will be installed by a certified technician.

The air conditioner will be controlled by a single electronic control panel. For ease of operation, the control panel will include variable adjustment for temperature and fan control and be conveniently located on the dash in clear view of the driver.

## **REAR LADDER**

## LADDER, TOP ACCESS

A wide easy climbing access ladder, constructed of aluminum rungs and extruded aluminum rails, will be provided on the opposite side of the ladder storage at the rear of the apparatus. The inside climbing area of the ladder will be a minimum of 13" wide. The lower section of the ladder will be retractable into the upper section to eliminate interference with the rear FMVSS lights. When lowered the bottom rung will be lower than the body, approximately 16.00" to 20.00" from the ground to allow a lower first step height.

The ladder will be slanted when in use for easy access, and fold against the body for storage to reduce the overall length. Corrosion resistant, stainless steel springloaded locks will hold the ladder in place.

This ladder will activate the Do Not Move Truck indicator, in the cab, if not in the stowed position when the parking brake is disengaged.

#### **PUMP**

## FOAM SYSTEM

Foam system is currently not functioning. Repair or replace the current system with an inline-foam eductor, discharge TBD.

## **DRAINS**

DS and PS pump panel drains will be removed and replaced with swing lever drain

Bidder	
Complies	

Yes No

handles. The lower pump panels will be removed and replaced with a new panel to accommodate the drain levers.

#### **DELUGE**

The existing deluge will be removed and replaced with the following.

## **DELUGE RISER**

A 3.00" deluge riser will be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping will be rigidly braced and installed securely so no movement develops when the line is charged. The riser will be gated and controlled at the pump operator's panel.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

#### TELESCOPIC PIPING

The deluge riser piping will include an 18.00" Task Force Model XG18 Extend-A-Gun extension. This extension will be telescopic to allow the deluge gun to be raised 18.00" increasing the range of operation. A position sensor will be provided on the telescopic piping that will activate the "do not move vehicle" light inside the cab when the monitor is in the raised position.

#### **DELUGE VALVE**

Place a quarter-turn ball valve between the deck gun piping and the extend-a-gun extension.

## **ELECTRICAL**

## **SHORELINE OUTLETS**

There will be two (2) 120-volt duplex, straight blade outlets in the following compartments. One (1) in B1, back compartments and one (1) in the P2 compartment. Exact location to be determined.

\*\*\*ALL EMERGENCY WARNING AND DOT LIGHTS WILL BE UPDATED TO LED LIGHTS AS FOLLOWS:

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		
	ı	lder
	L .	plies
	Yes	No
HEADLIGHTS		
There shall be four (4) JW Speaker®, rectangular LED lights with heated lens		
mounted in the front quad style, chrome housing on each side of the cab grille:		
- the outside light on each side shall contain a part number 055***1 low beam		
module		
- the inside light on each side shall contain a part number 055***1 high		
beam module		
-the headlight to include chrome bezels		
The low beam lights shall be activated when the headlight switch is on.		
The high beam and low beam lights shall be activated when the headlight switch		
and the high beam switch is activated.		
EDONIE ZONIE LIDDED WA DNING I ICHTG		
FRONT ZONE UPPER WARNING LIGHTS		
There will be one (1) 72.00" Whelen Freedom IV LED lightbar mounted on the		
cab roof.		
The lightbar will include the following:		
One (1) red flashing LED module in the driver's side end position.		
One (1) red flashing LED module in the driver's side front corner position.		
One (1) red flashing LED module in the driver's side first front position.		
One (1) red flashing LED module in the driver's side second front position.		
One (1) white flashing LED module in the driver's side third front position.		
One (1) red flashing LED module in the driver's side fourth front position.		
One (1) red flashing LED module in the driver's side fifth front position.		
One (1) 795 LED traffic light controller sent to national standard high priority in		
the center positions.		
One (1) red flashing LED module in the passenger's side fifth front position.		
One (1) red flashing LED module in the passenger's side fourth front position.		
One (1) white flashing LED module in the passenger's side third front position.		
One (1) red flashing LED module in the passenger's side second front position.		
One (1) red flashing LED module in the passenger's side first front position.		
One (1) red flashing LED module in the passenger's side front corner position.		
One (1) red flashing LED module in the passenger's side end position.		
There will be clear lenses included on the lightbar.		
There will be clear lenses included on the fightbar.		

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		
		lder
	-	plies
	Yes	No
The following switches may be installed in the cab on the switch panel to control the lightbar:		
A switch to control the flashing LED modules.		
The traffic light controller will be activated by a cab switch with emergency master control and there will be no momentary switch to activate the traffic light controller.		
The two (2) white flashing LED modules and the traffic light controller will be disabled when the parking brake is applied.		
The eight (8) red flashing LED modules in the front positions may be load managed when the parking brake is applied.		
<u>DIRECTIONAL (Front/Side)</u> Front turn signals to be Whelen Model M6T, amber LED arrow lights housed in chrome bezels located on each front corner and below headlights each side		
<u>LIGHTS, FRONT ZONE LOWER</u> Two (2) pair of Whelen model M6*, red/ blue flashing LED lights will be installed on the cab face above the headlights, in a common bezel.		
The color of these lights will be red LED/ clear lens.  These lights will meet or exceed NFPA front lower zone requirements.		
Per NFPA, these lights will be activated by a switch in the cab.		
STEP LIGHTS All cab and body step lights will be changed to LED, step lights.		
The new LED step lights on the apparatus will be illuminated per the current edition of NFPA 1901.		

<u>CAB PERIMETER SCENE LIGHTS</u>
There will be four (4) Amdor LumaBar H2O, Model AY-9500-020, 20.00" white LED strip lights provided, one (1) for each cab door.

Bidder	
Complies	
7.7	3.7

Yes

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

#### PUMP HOUSE PERIMETER LIGHTS

There will be two (2) Amdor LumaBar H2O, Model AY-9500-020, 20.00" LED weatherproof strip lights with brackets provided under the pump panel running boards, one (1) each side.

The lights will be controlled by the same means as the body perimeter lights.

## **BODY PERIMETER SCENE LIGHTS**

There will be two (2) Amdor LumaBar H2O™, Model AY-9500-020, 20.00" 12 volt DC LED strip lights provided at the rear step area of the body, one (1) each side shining to the rear.

The perimeter scene lights will be activated when a switch within reach of the driver is activated and the parking brake is applied.

## ADDITIONAL PERIMETER LIGHTS

There will be six (6) lights Amdor® Luma Bar® H2O, Model AY-9500-020, 20.00" LED perimeter light sticks provided one (1) light under compartment D1, one (1) light under compartment D3, one (1) light under compartment P1, one (1) light under compartment P3 and one (1) light under each side of the front bumper spaced evenly.

The lights will be activated by the same means as the body perimeter lights.

## **INTERMEDIATE LIGHT**

There will be two (2) Truck-Lite®, Model 60115Y, amber LED lights furnished, one (1) each side, horizontally in the rear fender panel. The light will double as turn signal and marker light.

A stainless steel trim will be included with this installation.

#### CAB CLEARANCE/MARKER/ID LIGHTS

- All at the same height

- To indicate the overall length of the vehicle - One (1) each side of the vertical centerline

		lder plies
	Yes	No
There will be five (5) amber LED lights provided to indicate the presence and overall width of the vehicle in the following locations:  - Three (3) amber LED identification lights will be installed in the center of the cab above the windshield.  - Two (2) amber LED clearance lights will be installed, one (1) on each outboard		
side of the cab above the windshield.		
REAR CLEARANCE/MARKER/ID LIGHTING There will be three (3) Truck-Lite®, Model 33050R, LED lights used as identification lights recessed and located at the rear of the apparatus per the following:  - As close as practical to the vertical centerline  - Centers spaced not less than 6.00" or more than 12.00" apart  - Red in color  - All at the same height		
There will be two (2) Truck-Lite, Model 33050R, LED lights recessed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:  - To indicate the overall width of the vehicle  - One (1) each side of the vertical centerline  - As near the top as practical  - Red in color		
- KCU III COIUI		
- To be visible from the rear		

There will be two (2) Truck-Lite, Model 33050R, LED lights recessed on the side of the apparatus as marker lights as close to the rear as practical per the following:

Bidder Complies		
Yes	No	i

- As near the top as practical
- Red in color
- To be visible from the side
- All at the same height

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

## FRONT CAB SIDE CLEARANCE/MARKER LIGHTS

There will be two (2) Truck-Lite®, Model 19036Y, amber LED lights installed to the outside of the cab one (1) on each side.

The lights will activate as additional directional lights with the corresponding directional circuit.

#### **REAR FMVSS LIGHTING**

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen®, Model M6BTT, red LED stop/tail lights
- Two (2) Whelen, Model M6T, amber LED arrow turn lights

The lights shall be provided with color lenses.

The lights will be mounted in a polished combination housing.

There will be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.

# LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the apparatus, but below the body. It will have a disconnect style cable to be removed after the department takes delivery of it.

Bidder	
Complies	
Yes No	

## LIGHTING BEZEL

There will be two (2) Whelen, Model M6FCV3P, three (3) place chromed ABS housings provided for the rear M6 series stop/tail, directional, and back up lights.

## SYNCHRONIZE WARNING LIGHTS

The sync wires to the following six (6) lights located rear hose body bulkheads on the apparatus will be connected together to maintain the flash patterns of the lights.

The lights located PS upper red warning, DS amber and PS lower red warning will flash together.

The lights located DS upper rear warning, PS amber and DS lower red warning will be changed to flash opposite the lights selected above.

## SYNCHRONIZE WARNING LIGHTS

The sync wires to the following four (4) lights located above the headlights on the apparatus will be connected together to maintain the flash patterns of the lights.

The lights located the outside warning lights above the headlights will flash together.

The lights located the inside warning lights above the headlights will be changed to flash opposite the lights selected above.

#### SYNCHRONIZE WARNING LIGHTS

The sync wires to the following five (5) lights located Passenger side of vehicle on the apparatus will be connected together to maintain the flash patterns of the lights.

The lights located rear upper side warning light and the warning light over the front wheel will flash together.

The lights located forward warning light in the hatch compt., over rear wheel warning light and the front bumper extension warning light will be changed to flash opposite the lights selected above.

#### SYNCHRONIZE WARNING LIGHTS

Bidder	
Complies	
37	NT-

Yes

The sync wires to the following five (5) lights located Drivers side of vehicle on the apparatus will be connected together to maintain the flash patterns of the lights. The lights located rear upper side warning light and the over front wheel light will flash together.

The lights located forward warning light in hatch compt., warning light in rear fender panel and the front bumper extension light will be changed to flash opposite the lights selected above.

#### **CORNERING/SCENE LIGHTS**

There will be one (1) pair of Whelen®, Model M6BUW, white 12 volt DC LED lights with black trim provided on the apparatus, no higher than the low beam headlights, recessed in the 45 degree angled portions of the front bumper, 1 each side. The LED lights will be wired so they activate and cancel when the battery switch is on, the headlight switch is on and with the directional light activation.

The lights will also be activated by the following:

- by the corresponding turn signal

## SIDE ZONE LOWER LIGHTING

There will be two (2) Whelen® Model M6\*\*, 4.32" high x 6.75" long x 2.25" deep flashing LED warning and scene lights with chrome trim located in the following positions:

- Two (2) lights, above rear wheel openings, one (1) each side. The side rear lights to be red warning LEDs.
- Two (2) lights, in each side of bumper, one (1) each side. The side lights to be red warning LEDs.

There will be a switch in the cab on the switch panel to control the flashing warning lights.

The scene LEDs will be activated by a switch at the driver's side switch panel, by a switch at the passenger's side switch panel and when a directional signal is activated.

The scene LEDs may be load managed when the parking brake is applied.

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		
	1	lder
	L	plies
	Yes	No
SIDE ZONE UPPER LIGHTING  There will be two (2) Whelen® Model M9 flashing LED warning and scene lights with chrome trim located in the following positions:  - Two (2) lights, above cab doors in A/C housing, one (1) each side. The side, rear		
lights to be red warning LEDs.  - Two (2) lights, above rear D1 compartment in place of existing, and the other on		
the PS side on the ladder rack panel, the side rear light to be red warning LEDs.  Lenses will be clear in color		
Lenses will be clear iii color		
REAR ZONE LOWER LIGHTING Two (2) Whelen, Model M9* LED flashing warning lights with bezels will be located at the rear of the apparatus.		
The driver's side rear light to be red.		
The passenger's side rear light to be red.		
Both lights will include a lens that is the same color as the LED's. There will be a switch located in the cab on the switch panel to control the lights.		
WARNING LIGHTS (Rear) There will be two (2) Whelen Model M9 flashing warning and scene light(s) with chrome trim provided (1) each side rear compt. bulkheads, below the PS catwalk. DS side will be level and in line with the PS light		
The color of the warning light LED's will be red.		
The lens color will be the same color as the LED's.		
The warning light(s) will be controlled with a separate switch in cab.		
D-7		

**DECK LIGHT** 

Bidder		
Complies		
Vac	No	

There will be two (2) Unity, Model AG-S-P46SLC, LED light installed at the rear of the apparatus.

Individual switch will be provided on the light for on/off and a cup switch will be installed on the rear driver side bulk head to control both Unity lights.

## **COMPARTMENT LIGHTING**

All body compartment lights will be replaced with the following:

There will be two (2) white 12-volt DC LED compartment light strips per compartment.

The dual light strips will be centered vertically along each side of the door framing. There will be two (2) light strips per compartment. The dual light strips will be in all body compartments. All light strips will be mounted using mechanical fasteners

Any remaining compartments without light strips will be replaced with a round lens and LED light

#### TRAFFIC DIRECTING LIGHT

There will be one (1) Whelen® Model TA4437M split traffic directing light with quantity two (2) 22.75" x 2.50" high x 4.43" deep section containing four (4) amber LED modules installed at the rear of the apparatus in place of existing.

The Whelen Model TACTL5 control head will be included with this installation to control the traffic directing lights. This control head will be energized when the battery switch is on.

The lights will be level across the rear.

# **12 VOLT VISOR LIGHTING**

There will be one (1) HiViz® Part # FT-WL-30-\*-\*, 22,176 effective lumens, 12-volt DC light Scene Light provided on the front visor, in place of existing

The color of the housing will be black

The light selected above will be controlled by two (2) switches. One (1) at the driver's side pump panel and one (1) in the cab, accessible to the driver and officer. The light may be load managed when the parking brake is applied.

Bidder	
Complies	
Yes No	

## 12 VOLT LIGHTING

There will be one (1) HiViz FIRETECH, Model FT-B-46-\*, 46.00" 12-volt DC LED light(s) with a combination of flood and spot optics and adjustable mounting brackets mounted DS in place of existing.

The light selected above will be controlled by two (2) switches. One (1) at the driver's side pump panel and one (1) in the cab, accessible to the driver and officer. The light may be load managed when the parking brake is applied.

## 12 VOLT LIGHTING

There will be one (1) HiViz FIRETECH, Model FT-B-46-\*, 46.00" 12-volt DC LED light(s) with a combination of flood and spot optics and adjustable mounting brackets mounted on ladder rack panel.

The light selected above will be controlled by two (2) switches. One (1) at the driver's side pump panel and one (1) in the cab, accessible to the driver and officer. The light may be load managed when the parking brake is applied.

#### 12 VOLT LIGHT BRACKET

There will be two (2) painted smooth aluminum bracket(s) installed on scene lights hosebed side sheet for the recessed flood light. The bracket(s) will have all wiring totally enclosed.

## **PAINT and GRAPHICS**

## **CORROSION and SMALL DENTS**

Metal finish and repair all minor body and cab corrosion and any small dents prior to repainting the complete exterior of the apparatus body and cab. Additional major corrosion and / or accident damage repair costs will be open: subject to inspection and written approval by the fire department.

#### **CAB INTERIOR**

Cab interior dents, chips, nicks and scrapes will be touched up and blended to match existing color.

Bidder		
Complies		
Yes No		

## REPAINT CAB EXTERIOR

The cab will be painted single color **RED** #344, the current color of the apparatus.

## **BODY PAINT COLOR**

Body will be painted single color RED #344, the current color of the apparatus.

## PAINT, COMPARTMENT INTERIOR

The compartment interior will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

All compartment trays, shelves and tool boards will be cleaned and repainted to match existing

## **BODY PAINT COLOR and SCHEME to MATCH ORIGINAL**

The exterior custom body will be metal finished and repainted to include hosebed, crosslays, cargo area and exterior of pump hose.

#### PAINT - BODY and CAB

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

- 1. Manual Surface Preparation All exposed metal surfaces on the custom body will be thoroughly cleaned and prepared for painting. Surfaces that will not be painted include all chrome plated, polished stainless steel, anodized aluminum and bright aluminum treadplate. Each imperfection on the exterior metal surface will be removed or filled and then sanded smooth for a smooth appearance. All seams will be sealed before painting.
- 2. Chemical Cleaning and Treatment The aluminum surfaces will be properly cleaned using a 4-phase, high pressure and high temperature acid etching system. All steel surfaces will be properly treated using a 3-phase, high temperature, cleaning/phosphatizing system. Surfaces are chemically cleaned to remove all dirt, oil, grease and metal oxides to ensure the subsequent coatings

Bidder		
Complies		
37.00	Ma	

bond well. An ultra pure water final rinse of 25 parts per million solids or less, will be applied to final rinse all metal surfaces at the conclusion of the metal treatment process. This final rinse ensures all chemical residues are removed and that no minerals, (salts), from the water dry onto the metal surface and remain under the primers and topcoats. These salts can lead to blistering and under film corrosion.

- 3. Primer/Surfacer Coats A minimum of two (2) mil dry, (.002), of two component urethane primer/surfacer will be hand applied to the chemically treated metal surfaces to provide a strong corrosion protective base coat and to smooth out the surface. The primer is a high solids and low VOC paint.
- 4. Hand Sanding to Ultra Fine Finish The primer/surfacer coat is lightly sanded with mild abrasive paper to an ultra smooth finish. This hand finish process is critical to produce the smooth mirror like finish in the topcoat.
- 5. Sealer Primer Coat A two- (2) component sealer primer coat is applied over the sanded primer to again build toward the final smooth finish. This layer of primer sealer also gives additional corrosion protection.
- 6. Topcoat Paint Two (2) coats of an automotive grade, two component acrylic urethane paint are applied to provide the lasting beauty and durability. The acrylic urethane topcoat contains a clear coat resin chemistry that creates the high gloss and depth of image. This type of topcoat provides the best resistance against acid rain and other more common chemicals.
- 7. Clearcoat Two (2) coats of an automotive grade two (2) component urethane will be applied. Lap style doors will be clear coated to match the body. Roll-up doors will not be clear coated and the standard roll-up door warranty will apply.

A cyclic corrosion test, (General Motors test GM-9540), of 40 cycles will be required before making changes to the exterior coating process. Exterior coating systems, (excluding the undercarriage components), must achieve a 1/16 or less maximum creep from the scribe for aluminum and an 1/8 or less maximum creep from the scribe for galvanneal after 40 cycles in the General Motors GM-9540 test.

Bidder		
Complies		
37.00	Ma	

1 03

Each batch of color topcoat, together with the finish painted vehicle, is tested for precise color match. Visual color match will be checked following ASTM D-1729, (American Standard Testing Methods), procedures using CIE, (International Commission on Illumination), D75 Northern Daylight light source. Instrumental color match will follow ASMT D-2244 procedures with a maximum delta E of 1.0 for whites, 1.4 for yellows, blues, greens and 1.5 for reds.

All removable items such as brackets, compartment doors, door hinges, trim, etc. will be removed and painted separately to insure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

## PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current State (his) regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.
- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations must have a 99.99% efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter means is used, it must have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient.
- Water from water wash booths will be reused. Solids will be removed mechanically on a continual basis to keep the water clean.
- Paint wastes are disposed of in an environmentally safe manner. They are used as fuel in kilns used in the cement manufacturing process thereby extracting energy from a waste material.
- Empty metal paint containers will be cleaned, crushed and recycled to recover the metal.

Bidder		
Complies		
37.00	Ma	

res

- Solvents used in clean-up operations will be collected, recycled on-site, or sent off-site for distillation and returned for reuse. Residue from the distillation operation will be used as fuel in off-site cement kilns.

#### **WARRANTY - PAINT AND CORROSION**

Limited Warranty Except as provided below, and provided the vehicle has been placed in service within 60 days after delivery to the original purchaser as established by our original invoice, for a period of **one** (1) **year** after. Manufacture warrants to the user that its cab and body are free of blistering, peeling, bubbling, or any other adhesion defect caused by defective manufacturing methods or paint material selection for exterior surfaces of the cab and body of the vehicle. This limited warranty will apply only if the vehicle is properly maintained and used in service which is normal to the particular vehicle. Normal service means service which does not subject the vehicle to stresses or

impacts greater than normally result from the careful use of the vehicle or chassis. If the buyer discovers a defect or nonconformity it must notify the manufactor in writing within 30 days after the date of discovery. This limited warranty is not transferable by the first user, and is applicable to the vehicle in the following percentage costs of warranty repair, if any:

This limited warranty applies only to cab and body exterior paint

# **REFLECTIVE BAND, LETTERING and GRAPHICS**

All graphics, lettering and reflective bands are to match existing scheme and layout

## **EMBLEMS**

All Pierce and Arrow XT emblems will be replaced with new

## **UNDERCOAT**

Upon completion the underside of the truck will be covered with a Carwell application

# <u>CHEVRON/INVERTED "V" STRIPING ON FRONT BUMPER & REAR WALL DIAMOND GRADE</u>

# REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT

REFORBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT		lder
	-	plies
	Yes	No
The front bumper shall be covered will chevron stripping.		
There will be alternating inverted "V" chevron striping located on the front bumper of the apparatus.  The striping will consist of the following colors:  The first color will be Diamond grade RED  The second color will be Diamond grade BLACK		
All vertical surfaces of the rear aluminum treadplate will be replaced with smooth aluminum sheet and covered will chevron stripping.		
There will be alternating inverted "V" chevron striping located on the rear wall of the apparatus to include the rear bulkheads and the rollup door.  The striping will consist of the following colors:  The first color will be Diamond grade RED  The second color will be Diamond grade YELLOW		
The size of the striping will be 6".  This stripe will be a minimum of 96 in sq. and will meet the NFPA 1901 requirement for size.		
FINALIZATION and DETAILING Prior to delivery, the entire vehicle will be washed to include the interior and exterior. All fluid levels will be checked on topped off if needed. The vehicle will be fully fueled.		
****ALL BIDS MUST INCLUDE AN ITEMIZED COST LIST OF ITEMS UNDERLINED****		

REFURBISHMENT/REPAIR SPECIFICATIONS FOR CITY OF KANKAKEE FIRE DEPARTMENT			
	Bid Com	Bidder Complies	
	Yes	No	